UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,265	10/31/2003	Allan M. Hansen	03-0085	2046
74576 HUGH P. GOR	7590 02/24/200 TLER	EXAMINER		
23 Arrivo Drive		KARDOS, NEIL R		
Mission Viejo, CA 92692			ART UNIT	PAPER NUMBER
			3623	
			MAIL DATE	DELIVERY MODE
			02/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
Office Action Occurrence	10/699,265	HANSEN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Neil R. Kardos	3623					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 10 No	ovember 2008						
• • • • • • • • • • • • • • • • • • • •	action is non-final.						
<i>,</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-18 and 21-32</u> is/are pending in the application.							
4a) Of the above claim(s) <u>31 and 32</u> is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-18 and 21-30</u> is/are rejected.							
7) Claim(s) is/are objected to.							
· · · · ·	8)⊠ Claim(s) <u>31 and 32</u> are subject to restriction and/or election requirement.						
Application Papers							
9) ☐ The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
a)							
<ul><li>2. Certified copies of the priority documents have been received in Application No</li><li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li></ul>							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
dee the attached detailed Office action for a list of the certified copies not received.							
• • • • • • • • • • • • • • • • • • • •							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application							
Paper No(s)/Mail Date 6) Other:							

Art Unit: 3623

## **DETAILED ACTION**

This is a **FINAL** Office Action on the merits in response to communications filed on November 10, 2008. Claims 1, 9, and 13 have been amended. Claims 19-20 have been cancelled. Claims 31-32 have been added, but have been withdrawn by the Examiner for being directed to a non-elected invention. Currently, claims 1-18 and 21-30 are pending and have been examined.

## Response to Arguments

Applicant's arguments filed on November 10, 2008 have been fully considered but they are not persuasive. Applicant argues the following:

- (A) Gupta's product descriptions don't include "availability expressions" which include operators and at least one operand. (see Remarks, page 9).
- (B) Gupta's framework does not include engineering requirements or manufacturing availability. (see Remarks, page 9).
- (C) Gupta's product definitions are provided in plain English, and they simply indicate the availability of certain product features. (see Remarks, page 9).
- (D) Claims 1-30 constitute statutory subject matter. (see Remarks, pages 10-11).

Regarding arguments (A) and (C), Examiner is unable to find claim language or limitations that correspond to Applicant's arguments. The claims do not recite "availability expressions." Rather, claim 1 recites "applicability expressions"; however, the claimed applicability expressions are not clamed so that they include "operators and at least one

operand." Further, it is unclear what claim limitation argument (C) refers to, as there is nothing in the claims that would appear to prohibit definitions provided in plain English.

Regarding argument (B), Examiner respectfully disagrees. Gupta discloses a product definition that includes an identification of the components and their interrelationships (i.e. engineering requirements). (see column 5: lines 23-25). There are four relationships between parts (i.e. engineering requirements): "requires choice, includes, can't work with (or excluded) and removes). (see column 6: lines 27-31). Gupta also discloses that the invention can identify the products that are still available (i.e. manufacturing availability) based on the options that have been selected. (see column 5: lines 39-41). Thus, Gupta discloses a product definition that includes both engineering requirements and manufacturing availability. (see also column 1: lines 21-24, disclosing valid configurations and availabilities; column 1: lines 65-67; column 2: lines 6-39; column 7: lines 26-49).

Regarding argument (D), Examiner respectfully disagrees. Applicant has apparently relied on the "useful, concrete, and tangible result" inquiry set forth in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998). However, the decision in *State Street* was overturned by the Federal Circuit in *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008). In *Bilski*, the Federal Circuit "conclude[d] that the 'useful, concrete and tangible result' inquiry is inadequate and reaffirm[ed] that the machine-or-transformation test outlined by the Supreme Court is the proper test to apply." *Bilski*, 545 F.3d at 959-60. In the previous Office Action, Examiner cited four cases (*Benson, Flook, Diehr*, and *Deener*) that are the basis for the

machine-or-transformation test set forth by the Supreme Court and reaffirmed by the Federal Circuit in *Bilski*. The Federal Circuit states that "the machine-or-transformation test...is the governing test for determining patent eligibility of a process under § 101." *Bilski*, 545 F.3d at 956.

As explained in the previous Office Action, the present claims fail the machine-or-transformation test and are therefore unpatentable. The rejection under § 101 has been maintained below.

## Response to Amendment

Applicant's amendments to the specification have been entered and are sufficient to overcome the objections to the drawings under 37 C.F.R. 1.84(p)(5) set forth in paragraph 3 of the previous Office Action.

Applicant's cancellation of claim 20 renders moot the rejection under § 112 set forth in paragraph 5 of the previous Office Action. Accordingly, this rejection has been withdrawn.

#### Election/Restrictions

Newly submitted claims 31 and 32 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The originally filed invention (pending claims 1-18 and 21-30) and the newly filed invention (claims 31-32) are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the

instant case, the newly filed subcombination (claims 21-23) has separate utility such as generating component definition expressions including a range of products, a mathematical operator, and a range of available configurations, as well as generating product definition expressions including the component definition expressions, a mathematical operator, and a specific configuration. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above <u>and</u> there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

Art Unit: 3623

(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 31-32 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

## Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-18 and 21-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Application/Control Number: 10/699,265

Art Unit: 3623

Page 7

Claims 1 and 21: Claims 1 and 21 are directed toward the statutory category of a process. In order for a claimed process to be patentable subject matter under 35 U.S.C. § 101, it must either: (1) be tied to a particular machine, or (2) transform a particular article to a different state or thing. See In Re Bilski, 545 F.3d 943, 956 (Fed. Cir. 2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method/process is not patentable subject matter under § 101. Thus, to qualify as a statutory process under § 101, the claim should positively recite the machine to which it is tied (e.g. by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g. by identifying the material that is being changed to a different state). Nominal recitations of structure in an otherwise ineligible method fail to make the method a statutory process. See Bilski, 545 F.3d at 957; Benson, 409 U.S. at 71-72. Thus, incidental physical limitations such as insignificant extra-solution activity and field of use limitations are not sufficient to convert an otherwise ineligible process into a statutory one.

Here, the claimed process fails to meet the above requirements for patentability under § 101 because it is not tied to a particular machine and does not transform underlying subject matter.

<u>Claims 2-18 and 22-30</u>: Dependent claims 2-18 and 21-30 are rejected for failing to remedy the deficiencies of the claims from which they depend.

Art Unit: 3623

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on calculate the data of cardination for natural in the United States.

sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, and 6-13 are rejected under 35 U.S.C. 102(b) as being anticipated by

Gupta et al. (US 6,405,308).

<u>Claim 1</u>: Gupta, as shown, discloses a method for creating a product definition,

comprising:

• instancing one or more usage-based product definition inputs (see at least abstract: "The

invention provides the ability to interactively select and configure a product");

• assessing at least one applicability expression including at least one of an engineering

requirement and a manufacturing availability associated with at least some of the usage-

based product definition inputs (see at least abstract: "The invention provides the ability

to interactively select and configure a product among a set of related products based on

availability and compatibility of features and options."); and

generating the product definition based at least one assessed applicability expressions

(see at least abstract: "The invention provides the ability to interactively select and

configure a product among a set of related products based on availability and

compatibility of features and options.").

<u>Claim 2</u>: Gupta discloses all the limitations of claim 1 as shown above. Furthermore, Gupta, as shown, discloses the following limitations:

• wherein instancing one or more usage-based product definition inputs includes instancing a part (see at least column 1, lines 19-22: "Before a system can be built the components of the system must be identified. To configure a system, a user must select the parts to include in the system.").

<u>Claim 3</u>: Gupta discloses all the limitations of claim 1 as shown above. Furthermore, Gupta, as shown, discloses the following limitations:

• wherein instancing one or more usage-based product definition inputs includes instancing a requirement (see at least column 2, lines 2-5: " The invention provides the ability to interactively select and configure a product among a set of related products based on availability and compatibility of features and options.").

<u>Claim 6</u>: Gupta discloses all the limitations of claim 1 as shown above. Furthermore, Gupta, as shown, discloses the following limitations:

• wherein instancing one or more usage-based product definition inputs includes instancing a predetermined component based on a product class configuration rule (see at least Fig 4 and column 2, lines 9-13: "Parts in a product definition are related or classified as: included (parts that are included by default), required choices (a choice among a group of parts that must be made to achieve a valid configuration), optional (parts that can be optionally included in the configuration).").

<u>Claim 7</u>: Gupta discloses all the limitations of claim 6 as shown above. Furthermore,

Gupta, as shown, discloses the following limitations:

• wherein the instancing a predetermined component based on a product class

configuration rule includes instancing a predetermined component based on a mandatory

configuration rule (see at least Fig 4 and column 2, lines 9-13: "Parts in a product

definition are related or classified as: included (parts that are included by default),

required choices (a choice among a group of parts that must be made to achieve a valid

configuration), optional (parts that can be optionally included in the configuration).".

<u>Claim 8</u>: Gupta discloses all the limitations of claim 6 as shown above. Furthermore,

Gupta, as shown, discloses the following limitations:

• wherein the instancing a predetermined component based on a product class

configuration rule includes instancing a predetermined component based on a

configuration default rule (see at least Fig 4 and column 2, lines 9-13: "Parts in a product

definition are related or classified as: included (parts that are included by default),

required choices (a choice among a group of parts that must be made to achieve a valid

configuration), optional (parts that can be optionally included in the configuration).").

<u>Claim 9</u>: Gupta discloses all the limitations of claim 1 as shown above. Furthermore,

Gupta, as shown, discloses the following limitations:

(see at least Fig 4 and column 2, lines 9-13: "Parts in a product definition are related or classified as: included (parts that are included by default), required choices (a choice

wherein assessing an applicability expression includes assessing an option expression

among a group of parts that must be made to achieve a valid configuration), optional

(parts that can be optionally included in the configuration).").

Claim 10: Gupta discloses all the limitations of claim 9 as shown above. Furthermore,

Gupta, as shown, discloses the following limitations:

• wherein assessing an option expression includes assessing at least one of a default option

expression, an available option expression, and a not available option expression (see at

least Fig 4 and column 2, lines 9-13: "Parts in a product definition are related or

classified as: included (parts that are included by default), required choices (a choice

among a group of parts that must be made to achieve a valid configuration), optional

(parts that can be optionally included in the configuration).").

Claim 11: Gupta discloses all the limitations of claim 9 as shown above. Furthermore,

Gupta, as shown, discloses the following limitations:

• wherein assessing an option expression includes assessing an option from an option

category associated to a product (see at least Fig 4 and column 2, lines 9-13: "Parts in a

product definition are related or classified as: included (parts that are included by

default), required choices (a choice among a group of parts that must be made to achieve

Art Unit: 3623

a valid configuration), optional (parts that can be optionally included in the

configuration).").

<u>Claim 12</u>: Gupta discloses all the limitations of claim 9 as shown above. Furthermore,

Gupta, as shown, discloses the following limitations:

• wherein assessing an option expression includes assessing at least one of a mandatory

option or a mutually exclusive option (see at least Fig 4 and column 2, lines 9-13: "Parts

in a product definition are related or classified as: included (parts that are included by

default), required choices (a choice among a group of parts that must be made to achieve

a valid configuration), optional (parts that can be optionally included in the

configuration).").

Claim 13: Gupta discloses all the limitations of claim 1 as shown above. Furthermore,

Gupta, as shown, discloses the following limitations:

• wherein assessing an applicability expression includes assessing a configuration rule, the

configuration rule being adapted to at least one of validate a configuration specification

and populate a configuration specification (see at least abstract: "A configuration system

validates a configuration using the system definition, the current state of the

configuration and user input.").

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the

manner in which the invention was made.

Claims 4, 5, 14-18, and 21-30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Gupta.

<u>Claim 4</u>: Gupta discloses all the limitations of claim 1 as shown above. Gupta does not

disclose the following limitations:

• wherein instancing one or more usage-based product definition inputs includes

transforming a coordinate system of a part from a part-centered coordinate system to a

product-centered coordinate system.

Official Notice is taken that it is old and well known in the design arts (e.g., AutoCAD)

that a coordinate system of a designed part is converted to the coordinate system of a designed

system/product when the part is included in a product or system. It would have been obvious to

one or ordinary skill in the art at the time of the invention to introduce coordinate transformation

when configuring a system from parts, as done by Gupta, in order to simplify the design and

presentation of a part when presented as part of a product.

Claim 5: Gupta discloses all the limitations of claim 1 as shown above. Gupta does not

disclose the following limitations:

• wherein instancing one or more usage-based product definition inputs includes instancing a sub-component having a first configuration, and instancing the sub-component a second time having a second.

Official Notice is taken that it is old and well known in the design arts (e.g., AuoCAD) that selected similar parts can be configured in numerous ways by specifying product parameters. For example, it is old and well known in aviation that airplane seats are configured differently between coach and first class. It would have been obvious to one or ordinary skill in the art at the time of the invention to allow for instancing a sub-component, as done by Gupta, multiple times, each with a different configuration, as doing so allows for design choices that meet a customer's needs.

<u>Claims 14 and 15</u>: Claim 14: Gupta discloses all the limitations of claim 1 as shown above. Gupta does not disclose the following limitations:

- wherein instancing one or more usage-based product definition inputs includes instancing a public instance representation of a lower level product by a higher level product.
- Claim 15: Gupta discloses all the limitations of claim 14 as shown above. Gupta does not disclose the following limitations:
  - wherein instancing a public instance representation of a lower level product by a higher level product includes filtering the public instance representation through the instance of the higher-level product.

In light of the specification and ordinary skill in the art of object-oriented programming and design (OOP/D), claims 14 and 15 appear to recite the well known operation of inheritance in an object class hierarchy, namely, that object creation ("instancing of a representation") of a child class necessarily creates an instance of the parent class ("instancing of a public class"), and that creating an instance of the child parent necessarily applies the object creation rules of the parent (i.e. the so called "filtering" of the public instance representation).

Official Notice is taken that such OOP/D concepts and operations are old and well known to those of ordinary skill in the art. It would have been obvious to one of ordinary skill in the art to use such operations and concepts as are found in OOP/D in the implementation of Gupta, the parts representations and relationships represented in an object class hierarchy, thus necessarily including the operations as recited, as this would have provided a well known programming methodology to a design methodology which closely matches the inherent nature of object-oriented programming.

<u>Claim 16</u>: Gupta discloses all the limitations of claim 1 as shown above. Gupta does not disclose the following limitations:

• wherein instancing one or more usage-based product definition inputs includes instancing in accordance with a configuration at location option by a customer.

Official Notice is taken that it is old and well known in the design arts to custom design/configure certain products per a customer's specification. Furthermore, it is old and well known to do so based on the product's intended location. Multiple products are designed to meet a customer's spatial needs. For example, it is old and well known in aviation that airplane seats

are configured differently between coach and first class. It would have been obvious to one or ordinary skill in the art at the time of the invention to allow for configuring a product, as done by Gupta, by taking into account a customer's location needs as doing so increases the odds of selling a product and guaranteeing customer satisfaction and repeat business.

<u>Claims 17 and 18</u>: Claim 17: Gupta discloses all the limitations of claim 1 as shown above. Gupta does not disclose the following limitations:

• wherein at least one of instancing one or more usage-based product definition inputs includes instancing in accordance with a unitized manufacturing assembly plan.

Claim 18: Gupta discloses all the limitations of claim 1 as shown above.

Gupta does not disclose the following limitations:

 wherein assessing at least one of an applicability expression, an engineering requirement, and a manufacturing availability expression includes assessing in accordance with a unitized manufacturing assembly plan.

Official notice is taken that it is old and well known in the art of design and manufacturing to select and design a product with accordance with a manufacturing assembly plan. For example, Design for Manufacturability (DFM) and Design for Assembly (DFA) ensure that system design meet feasible manufacturability requirements. It would have been obvious for one of ordinary skill in the art at the time of the invention to implement DFM and DFA practices with the design and system configuration of Gupta, as doing so ensures that product design meets feasible manufacturability requirements for each part and/or component in

the design. In addition, implementing DFM and DFA practices has the added benefit of reducing the assembly time and assembly costs.

# <u>Claim 21</u>: Gupta, as shown, discloses the following limitations:

A method for creating an air vehicle definition, comprising:

- instancing a usage-based [fuselage] definition input (see at least abstract: "The invention provides the ability to interactively select and configure a product"), the usage-based fuselage definition input including at least one of a fore body definition input, a mid body definition input, an aft body definition input, a wing definition input, a vertical tail definition input, and a horizontal tail definition input;
- instancing a usage-based [propulsion system] definition input (see at least abstract: "The invention provides the ability to interactively select and configure a product");
- assessing at least one of an applicability expression, an engineering requirement, and a manufacturing availability expression associated with at least some of the definition inputs (see at least abstract: "The invention provides the ability to interactively select and configure a product among a set of related products based on availability and compatibility of features and options."); and
- generating the [air vehicle] definition based on at least some of the definition inputs, applicability expressions, engineering requirements, and manufacturing availabilities (see at least abstract: "The invention provides the ability to interactively select and configure a product among a set of related products based on availability and compatibility of features and options.").

Application/Control Number: 10/699,265

Art Unit: 3623

Gupta, does not disclose the following limitations:

a usage-based fuselage, ... the usage-based fuselage definition input including at least

one of a fore body definition input, a mid body definition input, an aft body definition

Page 18

input, a wing definition input, a vertical tail definition input, and a horizontal tail

definition input;

a usage-based propulsion system

Gupta, as shown teaches selecting and configuring a product based on availability and

compatibility of features and options. The recitation of fuselage (and its components) and

propulsion systems are intended use and the method steps do not depend on any actual

data/inputs/rules used; hence the applicability of the method to an air vehicle definition is not

given any patentable weight. Per Gupta, column 5, lines 46-48: "Examples of systems that can

be maintained or configured using the invention include automobiles, computers, time clock

machines, and shoes." It would have been obvious to one of ordinary skill in the art at the time

of the invention to extend the method of Gupta to define airplanes, helicopters, trains, and other

tailored products as all are known to have customizable features that depend on a customer's

needs and preferences.

The above rational applies to the rejection of claims 22-30, which depend on claim 21.

Claim 22: Refer to rejection of claim 4 above.

<u>Claim 23</u>: Refer to rejection of claim 6 above.

Application/Control Number: 10/699,265

Art Unit: 3623

Claim 24: Refer to rejection of claim 7 above.

Claim 25: Refer to rejection of claim 8 above.

Claim 26: Refer to rejection of claim 10 above.

Claim 27: Refer to rejection of claim 13 above.

Claim 28: Refer to rejection of claim 14 above.

Claim 29: Refer to rejection of claim 15 above.

Claim 30: Refer to rejection of claims 17-18 above.

### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 3623

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The

examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neil R. Kardos Examiner

Exammer

Art Unit 3623

NRK

2/18/09

/Jonathan G. Sterrett/

Primary Examiner, Art Unit 3623